



training and  
certification



# Thank you for joining!

## AWS Certified Cloud Practitioner Week 1 Content Review

- This session will be recorded
- Please stay on mute
- Submit questions via chat function
- If you have other questions please contact [helcreig@amazon.com](mailto:helcreig@amazon.com)

Aaron Trockman



Partner  
Enablement

# AWS Certified Cloud Practitioner

Week 1 Content Review

**Aaron Trockman**

Partner Enablement Manager

AWS

# About the Exam

# AWS Certified Cloud Practitioner

## About the Exam

- 90 minutes
- 65 Questions
  - Scored 100 to 1000 (700+ pass)
- Immediate Pass/Fail Result
- \$100/voucher
- Multiple Response & Individual response questions
- In-Person & remote proctoring available



# AWS Certified Cloud Practitioner

## Key Exam Topics

% of Exam	Domain	Focus Areas
26%	Cloud Concepts	Value proposition of the cloud
25%	Security & Compliance	Shared responsibility model, core security services
33%	Technology	AWS global infrastructure, Core AWS services
16%	Billing & Pricing	Pricing/cost analysis tools, service pricing models, billing

# AWS Certified Cloud Practitioner

## Helpful Resources

### Training

- [AWS Partner Accreditation: Business](#)
- [AWS Partner Accreditation: Technical](#)
- [AWS Partner: Cloud Economics Accreditation](#)
- [AWS Partner: AWS Cloud Practitioner Essentials](#)

### White Papers

- [Overview of Amazon Web Services](#)
- [AWS Well-Architected Framework](#)
- [How AWS Pricing Works: AWS Pricing Overview](#)
- [Management and Governance Lens](#)
- [AWS Global Infrastructure](#)
- [Compare AWS Support Plans](#)
- [AWS Acceptable Use Policy](#)
- [Shared Responsibility Model](#)

### Exam Preparation

- [Quiz Show 1](#)
- [Quiz Show 2](#)
- [Quiz Show 3](#)
- [Quiz Show 4](#)
- [Sample Questions](#)
- [Schedule an Exam](#)

# Introduction to AWS Cloud



# What is Cloud?



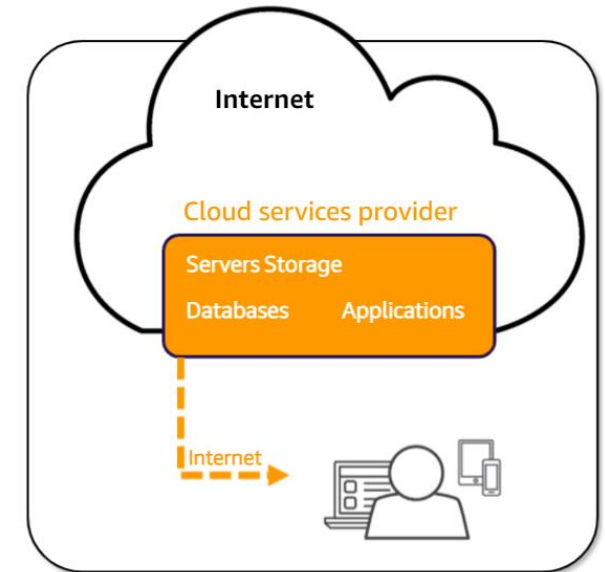
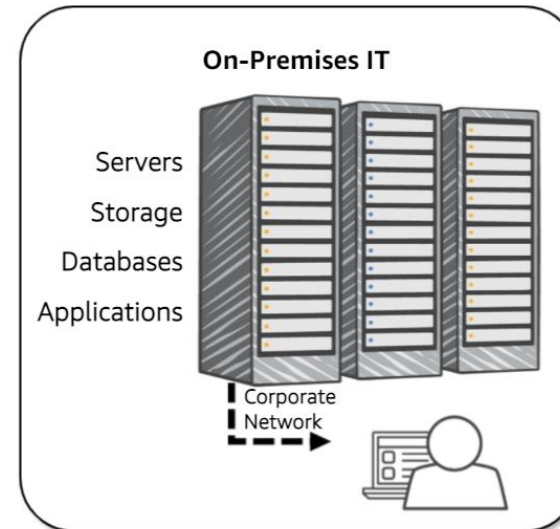
On-demand delivery of IT resources via the internet

## On-Premises

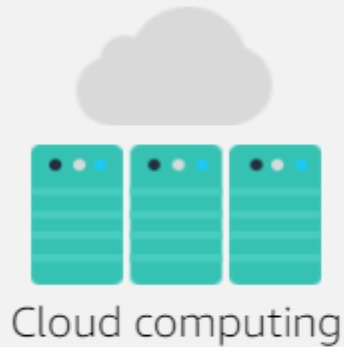
Traditionally, a company had to invest in all the physical hardware necessary for running business systems at peak utilization.

## Cloud

With Cloud Computing, companies can now access these resources via a Cloud Services Provider, like AWS, and only pay for what they actually use.



# Major Advantages of Cloud over On-Premises



01. Trade capital expense for variable expense
02. Benefit from massive economies of scale
03. Stop guessing capacity
04. Increase speed and agility
05. Stop spending money running and maintaining data centers
06. Go global in minutes

# AWS Global Infrastructure

# AWS Regions



A Region location around the world where AWS clusters data centers

## What's in a Region?

Each AWS Region consists of multiple, isolated, and physically separate Availability Zones (AZ's)

## Why are they important?

AWS Regions are totally isolated from each other, creating the greatest possible fault tolerance and stability.



# AWS Availability Zones (AZs)

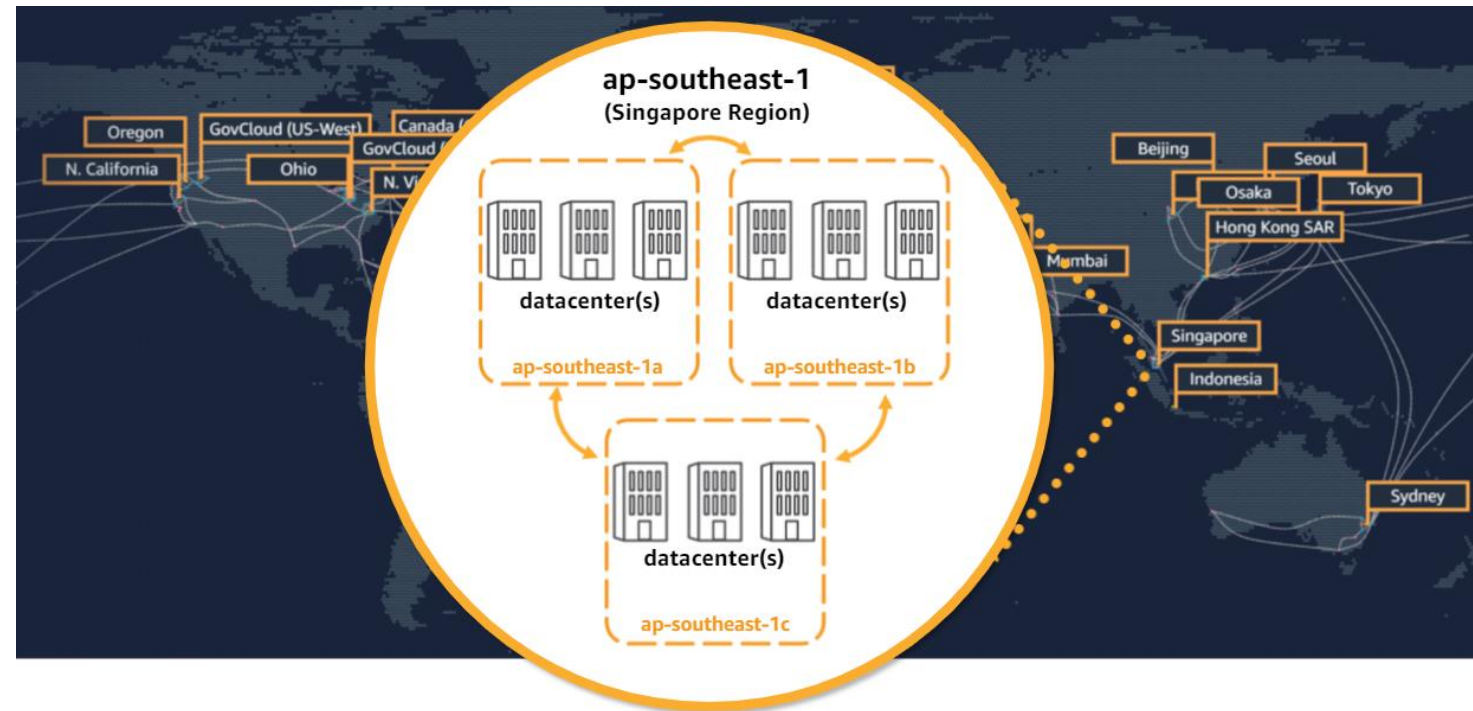


One or more discrete data centers with redundant power, networking, and connectivity located within an AWS Region

## Why are they important?

AZs give customers the ability to operate production applications and databases that are more highly available, fault tolerant, and scalable than would be possible from a single data center.

AZs are connected to each other with fast, private, and secure fiber-optic networking, enabling you to easily architect applications that automatically fail-over between AZs without interruption.



# Points of Presence (PoP)



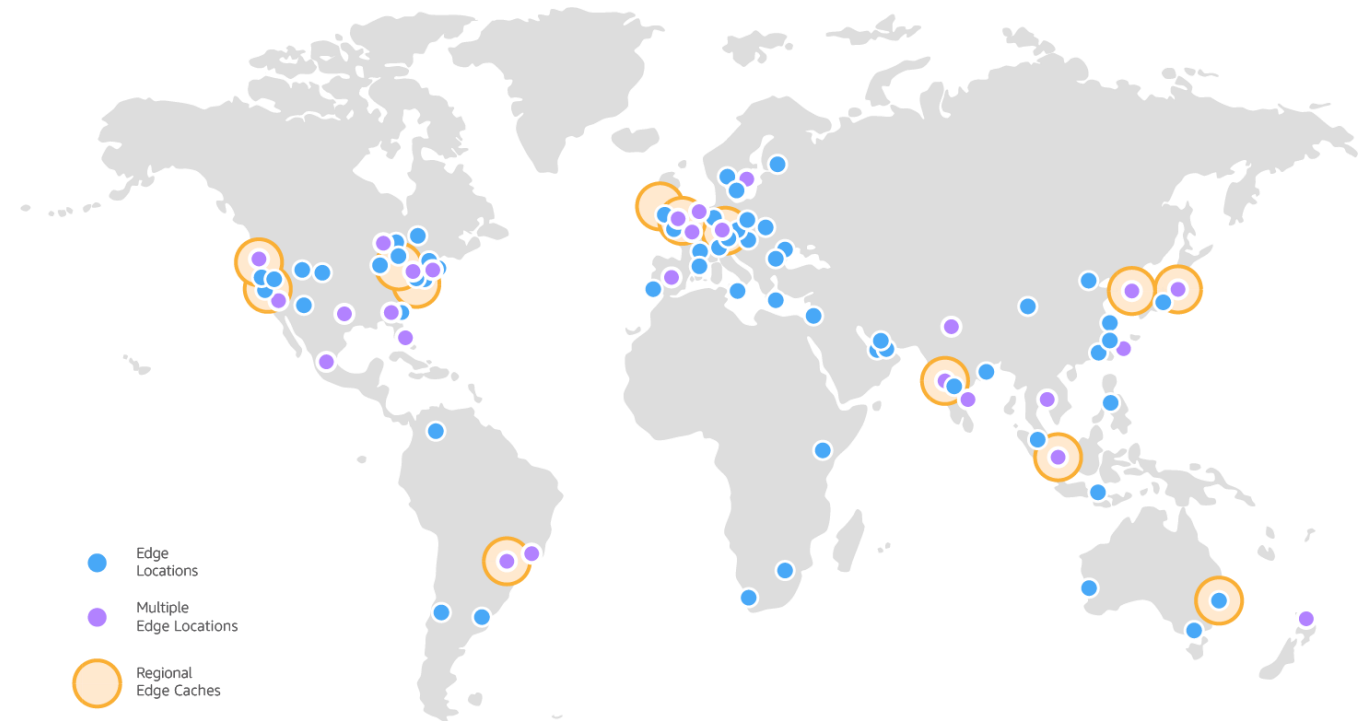
310+ Points of Presences and 13 regional edge locations

## What are they?

Smaller endpoints used for hosting cached, frequently accessed, data.

## Why are they important?

Points of Presence enable Amazon CloudFront to securely deliver data, videos, applications, and APIs to customers globally with low latency and high transfer speeds, all within the security of the AWS network and a developer-friendly environment.



# AWS Core Services

Compute, Storage, Database, Security, Management, Networking

# Amazon EC2



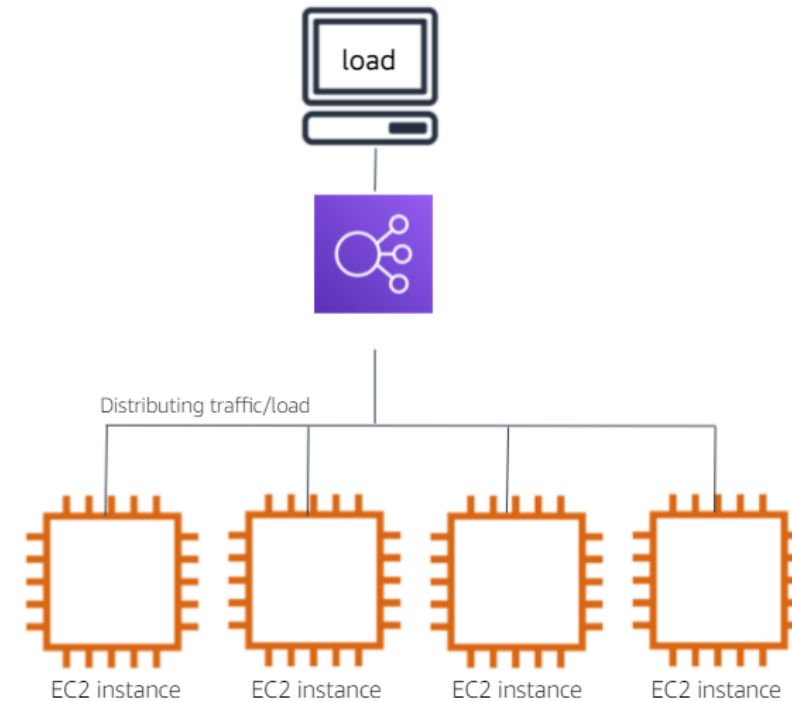
Provides secure, resizable compute capacity in the AWS Cloud, enabling servers to be spun up in minutes without the need for physical hardware.

## Amazon EC2 Auto Scaling

Automatically add or remove EC2 instances according to conditions you define. There is no additional fee for Auto Scaling

## Amazon Elastic Load Balancing

Automatically distribute traffic across multiple EC2 instances (or other services). This service has additional charges.





# Amazon Elastic Block Store (EBS)

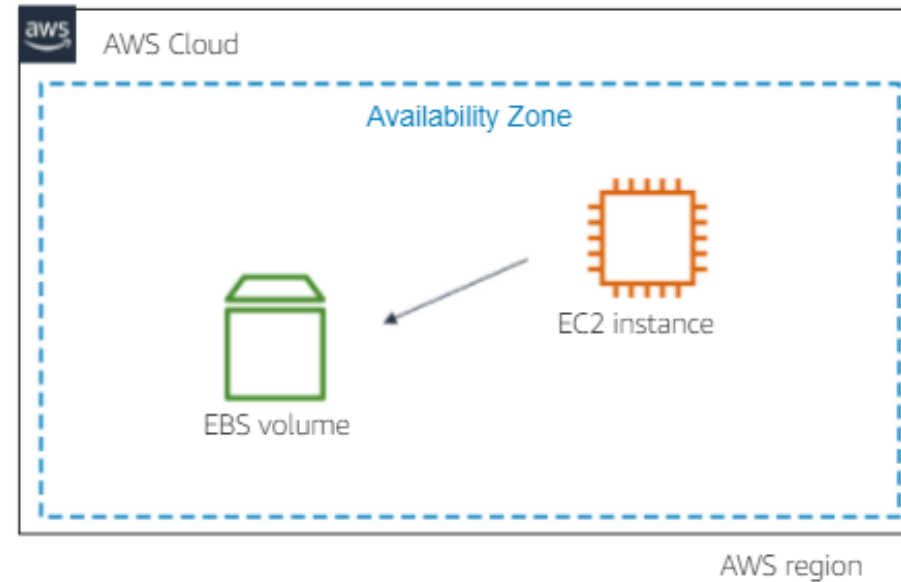


Provides durable, block-level storage for use with EC2 instances

## What does it do?

Network attached storage that persists independently from the instance and acts as a physical hard drive, similar to the local disk drive on a physical machine. Once deployed in an AZ, it is automatically replicated to prevent data loss, and can be attached to any instance in the same AZ.

An individual EBS volume can only be attached to one EC2 instance. However, an instance can have multiple EBS volumes attached to it.



# Amazon Simple Storage Service (S3)

Provides infinitely scalable, highly durable object storage in the AWS Cloud

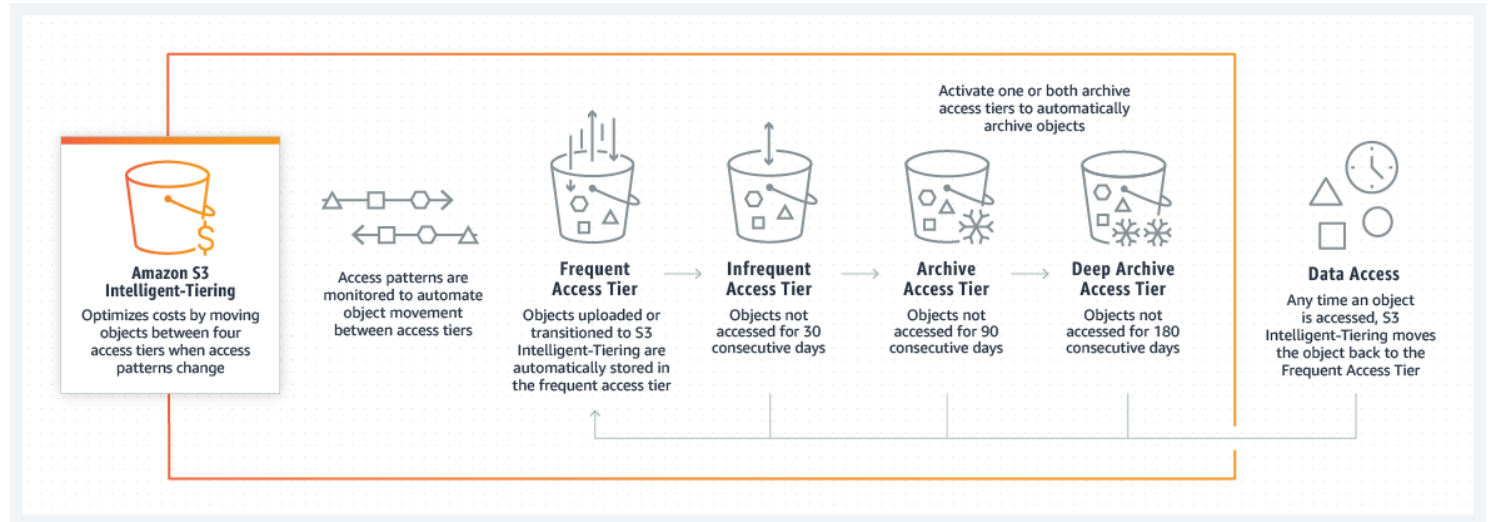


## What does it do?

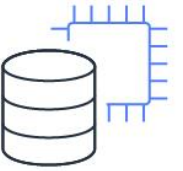
Stores objects in resources called Buckets, which can be up to 5TB in size, but there are no total limits to the # of objects stored.

Designed to provide 99.999999999% durability and 99.99% availability

Offered at multiple tiers of pricing based on the frequency the objects are needed, and the speed at which they are required to be retrieved.



# Amazon Relational Database Service (RDS)



Managed, relational database service

## What does it do?

Amazon Relational Database Service (Amazon RDS) is a web service that makes it easier to set up, operate, and scale a relational database in the AWS Cloud.

It provides cost-efficient, resizable capacity for an industry-standard relational database and manages common database administration tasks, such as hardware provisioning, database setup, patching and backups

## Amazon RDS database engines



# Amazon DynamoDB

NoSQL database that delivers single-digit, millisecond performance at any scale



## What does it do?

Key-value and document database.

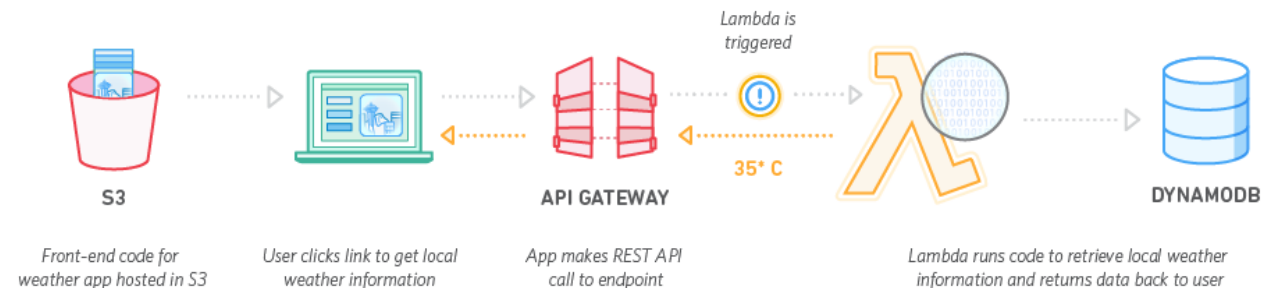
Whereas a relational database is optimized for storage, DynamoDB is optimized for compute, making it well-suited for workloads that require massive amounts of reads and writes per second.

A serverless managed service - no servers to provision, patch, or manage and no software to install, maintain, or operate.

### Example: Analysis of Streaming Social Media Data



### Example: Weather Application



# Amazon Virtual Private Cloud (VPC)



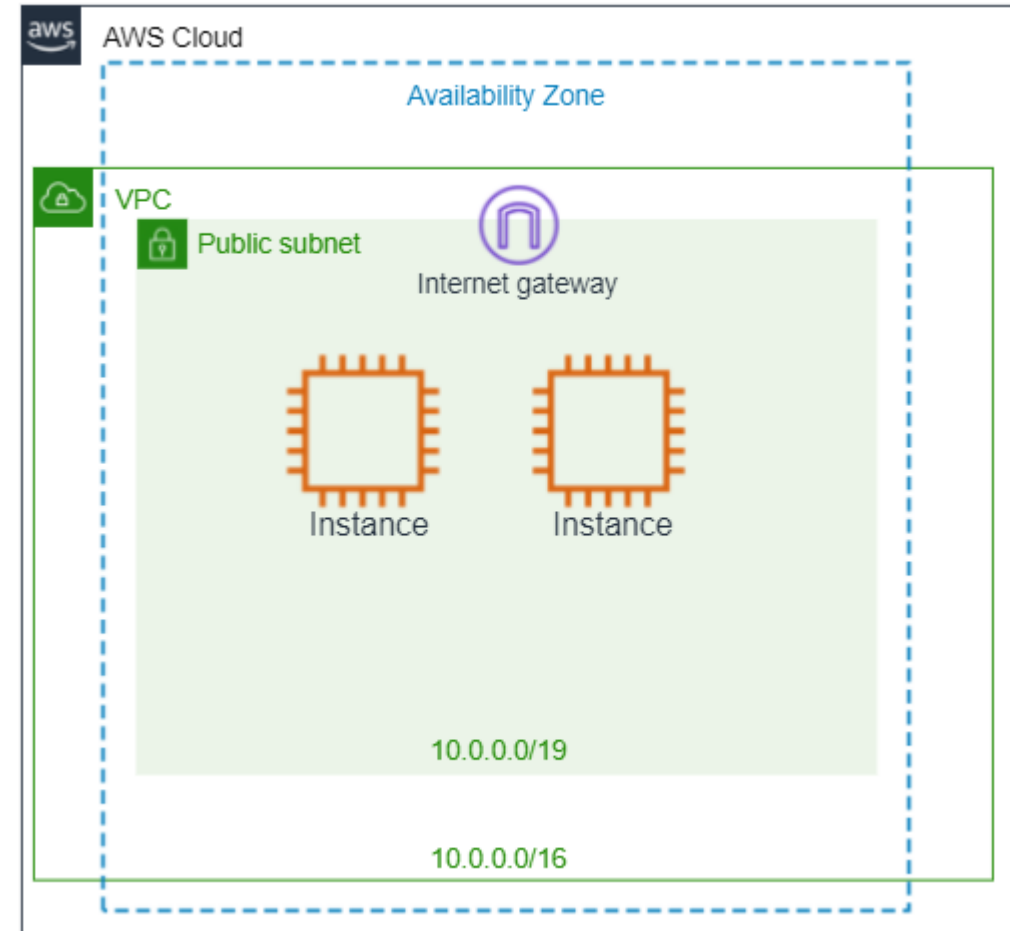
Enables AWS customers to build a virtual network in the cloud, similar to a traditional network they would have operated in their data center

## Security Groups

Control access to instances

## Network Access Control Lists

NACLs control access to subnets







# Amazon Identity and Access Management (IAM)



Enables AWS customers to manage access to AWS services and resources

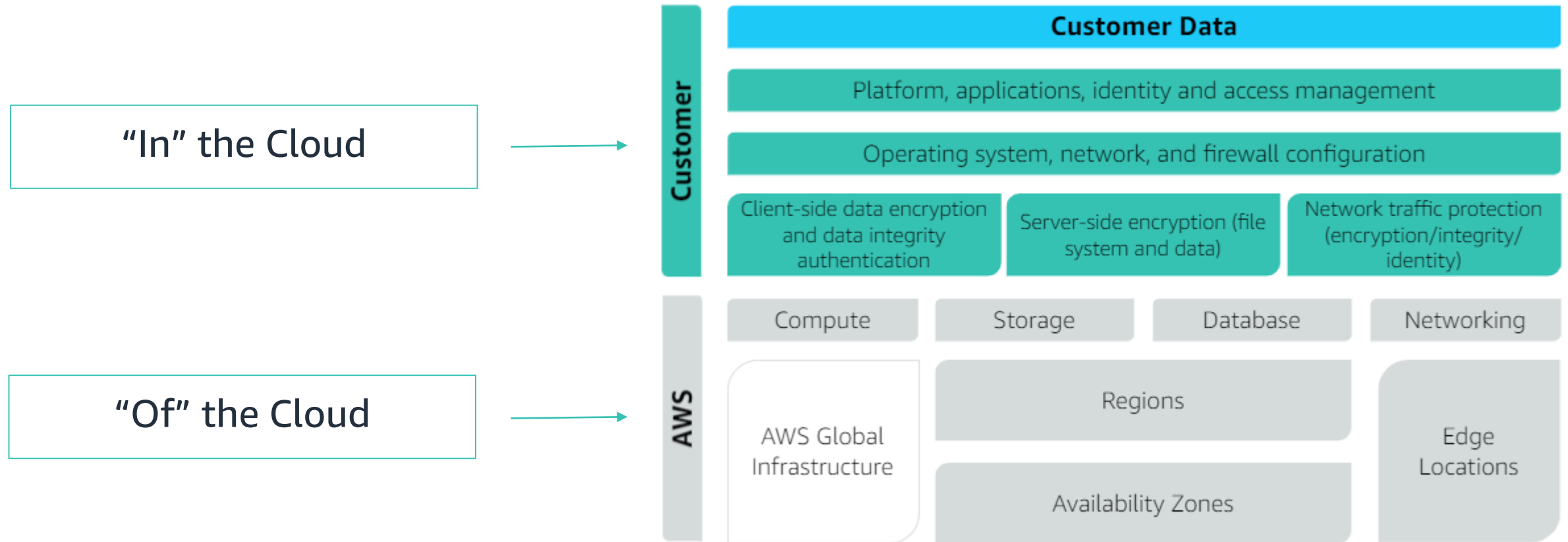
## How does it work?

With IAM, you can create and manage Users and Groups and then assign permissions to either allow or deny access to AWS resources.

-  Fine-grained access control to AWS resources
-  Multi-factor authentication
-  The ability to analyze access
-  Integration with corporate directories

# AWS Shared Responsibility Model

# AWS Shared Responsibility Model





# Thank you!

**Aaron Trockman**

trockman@amazon.com

